

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A process for manufacturing a catalyst which comprises a cobalt species on a titania support having upon reduction at 425°C, a cobalt metal surface area, as measured by hydrogen chemisorption at 150°C, in the range from 15 to 100 m² per gram total cobalt, comprising mixing together said titania support and an aqueous solution of cobalt ammine carbonate at a pH in the range 7.5 to 12, and then heating to a temperature in the range 60 to 110°C to effect decomposition of the cobalt ammine carbonate and precipitation of an insoluble cobalt compound onto said titania support, wherein the pH is maintained above 7.5 during the heating step, further comprising directly reducing the cobalt compound without a calcining step.
2. (Previously Presented) A process according to claim 1, comprising saturating a titania support with an aqueous solution of cobalt ammine carbonate, and removing the excess of the solution, before heating the resulting product to a temperature sufficient to effect decomposition of the cobalt ammine carbonate.
3. (Previously Presented) A process according to claim 1, wherein the mixture of titania support and said cobalt solution is heated to a temperature sufficient to effect decomposition of the cobalt ammine carbonate in situ before separating the solid catalyst from the mixture and drying.
4. (Previously Presented) A process according to claim 1, wherein the titania support and cobalt solution are maintained at an elevated temperature for a period of at least 60 minutes.
5. (Cancelled)
6. (Currently Amended) A process according to claim 1 ~~further comprising~~ wherein the step of reducing the resulting catalyst product is performed with hydrogen at a temperature between 300 to 550°C.

7. (Previously Presented) A process according to claim 6, further comprising the step of dispersing the reduced catalyst in particulate form product in a carrier matrix.
8. (Cancelled)
9. (Currently Amended) A catalyst ~~or catalyst precursor~~ comprising a cobalt species on a titania support and having upon reduction at 425°C, a cobalt metal surface area, as measured by hydrogen chemisorption at 150°C, in the range from 15 to 100 m² per gram total cobalt, made by mixing together said titania support and an aqueous solution of cobalt ammine carbonate at a pH in the range 7.5 to 12, and then heating said mixed together titania support and aqueous solution of cobalt ammine carbonate to a temperature in the range 60 to 110°C to effect decomposition of the cobalt ammine carbonate and precipitation of an insoluble cobalt compound onto said titania support, wherein the pH is maintained above 7.5 during the heating step, further comprising directly reducing the cobalt compound without a calcining step.
10. - 14. (Cancelled)
15. (Currently Amended) A catalyst ~~or catalyst precursor~~ according to claim 9 having a cobalt metal surface area in the range from 20 to 40 m² per gram total cobalt.
16. (Previously Presented) A catalyst according to claim 9 wherein the titania is a coating on a silica or alumina support.
17. (Previously Presented) A catalyst according to claim 16 wherein the titania coating is present as a coating of 0.5 to 5 monolayers of titania on the underlying support.
18. (Previously Presented) A process according to claim 1 wherein the titania support and aqueous solution of cobalt ammine carbonate are mixed at a pH in the range 9 to 12.
19. (Currently Amended) A process according to claim 1-3 further comprising filtering a solid material from the aqueous solution, drying the solid material, and directly reducing the cobalt compound without a calcining step.

20. (Previously Presented) A process for manufacturing a catalyst which comprises elemental cobalt on a titania support having, upon reduction at 425°C, a cobalt metal surface area, as measured by hydrogen chemisorption at 150°C, in the range from 15 to 100 m² per gram total cobalt, comprising mixing together said titania support and an aqueous solution of cobalt ammine carbonate at a pH in the range 9 to 12, then heating to a temperature in the range 60 to 110°C to effect decomposition of the cobalt ammine carbonate and precipitation of an insoluble cobalt compound selected from basic cobalt carbonate species and cobalt oxides onto said titania support, filtering a solid material from the aqueous solution, drying the solid material, and directly reducing the cobalt compound without a calcining step.
21. (Previously Presented) A catalyst comprising elemental cobalt on a titania support and having, upon reduction at 425°C, a cobalt metal surface area, as measured by hydrogen chemisorption at 150°C, in the range from 15 to 100 m² per gram total cobalt, made by mixing together said titania support and an aqueous solution of cobalt ammine carbonate at a pH in the range 9 to 12, and then heating said mixed together titania support and aqueous solution of cobalt ammine carbonate to a temperature in the range 60 to 110°C to effect decomposition of the cobalt ammine carbonate and precipitation of an insoluble cobalt compound selected from basic cobalt carbonate species and/or cobalt oxides onto said titania support, filtering a solid material from the aqueous solution, drying the solid material, and directly reducing the cobalt compound without a calcining step.